Add new claims 8 – 24 as follows:

8. Orthotic apparatus in accordance with claim 3 in which the first and second friction members are flat surfaces.

9. Orthotic apparatus in accordance with claim 3 in which the first and second friction members are curved surfaces.

10. Orthotic apparatus in accordance with claim 4 in which the first and second friction members are flat surfaces.

11. Orthotic apparatus in accordance with claim 4 in which the first and second friction members are curved members.

12. Orthotic apparatus in accordance with claim 2 in which said program creates greater friction by pressing the friction members together more tightly when the limbs are being moved in a direction aided by weakened muscles, whereby weakened muscles are given greater support than stronger muscles.

13. A method of reducing arthrokinetic dysfunction after determining tracking problems by examining the patient comprising the steps of:

measuring the tracking of a limb while it is moved about a joint;

creating resistance to movement of the limb about the joint using an external resistance that is independent in resisting force of the velocity of movement of the limb;

controlling the resistance so as to cause proper tracking.

14. A method in accordance with claim 13 in which the step of controlling the resistance includes the step of adjusting the resistance until tracking is proper.

15. A method in accordance with claim 14 in which the resistance is adjusted until a patient with arthrokinetic dysfunction can move the limb without pain.

A7 Cont

16. A method in accordance with claim 15 in which the resistance is adjusted under the control of a microprocessor.

17. A method in accordance with claim 16 in which the microprocessor controls the pressure between frictional surfaces that move with the limb about the joint by controlling magnetic attraction forcing the surfaces together.

18. A method in accordance with claim 16 in which the microprocessor controls the pressure between frictional surfaces that move with respect to each other in accordance with the motion of the limbs about the joint by controlling a motor driven screw that tightens and loosens the surfaces under the control of the microprocessor.

19. A method in accordance with claim 18 in which the step of creating resistance comprises the steps of creating resistance that resists motion by a weakened muscle to a greater extent than to a normal muscle, whereby support is provided to the weakened muscle.

20. A method of aiding a person in physical activity, wherein the person has weakened or damaged muscle, comprising the steps of:

providing resistance to movement in the direction of natural forces, wherein the natural forces are offset;

the step of applying resistance comprising the step of applying a resistance which varies in magnitude in accordance with a program, in which said resistance is independent of velocity of movement.

21. A method in accordance with claim 21 in which the program is within a microprocessor.

22. A method in accordance with claim 20 in which the resistance is controlled by electrical forces.

23. A method in accordance with claim 22 in which the electrical forces are applied by electromagnets forcing frictional surfaces together.